

# LOOK OUT FOR European House Borer



Above: Adult European house borer – Picture not actual size  
(Dept of Agriculture Western Australia)

## What is it?

European House Borer (EHB) (*Hylotrupes bajulus* Linnaeus), is a destructive pest of untreated seasoned coniferous timber, including pine, fir and spruce (*Pinus*, *Abies*, *Picea*, *Araucaria* and *Pseudotsuga* species). It can cause major structural damage to buildings.

Timbers commonly used for structural and joinery purposes in Australia, including radiata pine, southern pine, Douglas fir, hoop pine and bunya pine have all been shown to be susceptible to damage by EHB.

In Western Australia EHB has been found in susceptible dead trees, logs and living trees with dead wood (dried out damaged branches or trunks). EHB also infests susceptible roof timbers, wall frames, flooring, architraves, door frames and timber articles such as pine furniture, shipping crates, pallets and transport supporting timber and frames.

## Where did it come from?

EHB is found in Europe, the Middle East (Turkey), North Africa, South Africa, South America, USA, and China. EHB has been detected several times previously in Australia but these infestations were eradicated by fumigation. In 2004 EHB was detected in Western Australia, and since then has been found in 60 Perth suburbs. An eradication program was put in place in 2004. This program is changing from eradication to a containment program but the need for vigilance continues.

## What to look for?

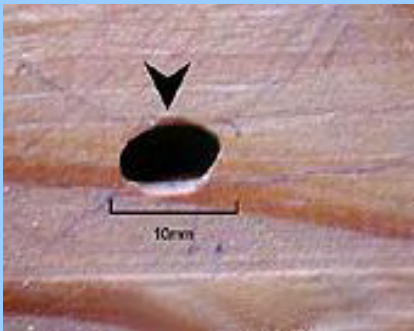
The most visible evidence to that pine wood, structural timber or timber articles are infested with EHB is the presence of:

- Adult beetles which are brownish-black to black and have a slightly flattened appearance. The beetle's wings are usually all black and may have distinctive white patches. The top surface of the first body segment behind the head has two raised, black, shiny knobs that resemble eyes. Adults are approximately 18-25mm in length with antennae about half as long as the body.
- Characteristic oval-shaped holes, approximately 5-10mm in length and running in line with the grain of the timber on the surface of infested timber from which the adult beetle has emerged.
- Frass, which is a mixture of fine powdery particles of wood dust and pellets of excrement, can sometimes be found below the exit holes of infested timber where adult beetles have emerged.
- Long blister-like swellings on the surface of the timber may be evident these are caused by the tightly-packed frass forcing 'out' the thin layer of uneaten wood.



**Above:** Off-cut of timber exhibiting oval-shape exit holes caused by emerging adult beetles

**Below:** Close-up of adult beetle exit hole running along the grain of the timber – Picture not actual size (CD Pless and G Schweiger UT E&PP)



**Above:** Exposed larvae boring through timber. Picture not to scale (Clemson University USDA Cooperative Extension Slide Series)

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Other evidence to indicate EHB timber infestation includes:

- Soft scraping sounds made by the larvae as they feed. This can often be heard at night and may be audible from some distance.
- EHB larvae within the timber. Larvae are elongate and cylindrical in shape with an enlarged and flattened head. The larvae are between 19-41mm long and around 7.5mm wide at maturity. Larvae can be identified by a row of three small black single-lens eyes on each side of the head.
- Galleries (tunnels) within the timber which are formed by the boring larvae and are frequently tightly packed with frass. Galleries within the timber rarely break through the surface of the timber and are therefore seldom detected.
- Batches of up to 120 eggs which are laid in crevices or cracks in timber.

## How is EHB Spread?

EHB has a relatively long larval period which can vary from 1 to 12 years (2-5 years in Western Australia) before emergence of the adult beetle. This enables the infestation to remain undetected and has contributed to its spread to other parts of the world in timber and timber articles such as furniture.

Adult EHB beetles will travel only minimal distances if their food source has not been exhausted. However they are considered to be strong fliers and can cover a considerable distance resulting in infestations of new areas.

The greatest spread of EHB is caused by human assisted transport of infested pine timber or timber products.

The pest is able to live in a wide variety of climatic conditions, although it has preference for temperate habitats. It is usually found in coastal regions.

## Management

EHB is considered a quarantine pest, various options exist for treatment of infested timber, these include, heat treatment and fumigation with approved fumigants applied by licensed pest control operators. To prevent infestation chemical preservative treatment of timbers can be used to provide protection.

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Revised 29 June 2011